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adenoviral DNA.

8. A method of treating cancer in a subject which comprises introducing into a cancer cell of the subject the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA.

9. A method of preventing concatamerization of a linear wild-type adenoviral DNA which comprises introducing into a cell comprising the wild-type adenoviral DNA, the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA.

10. A method of inhibiting V(D)J recombination of nucleic acid sequences encoding immunoglobulins in a cell of the immune system which comprises introducing into the cell, the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA.

11. A method of preventing cell apoptosis induced by viral DNA replication in the cell which comprises introducing into the cell, the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA.

12. A method of increasing efficiency of chemotherapeutic or radiation treatment of cancer in a subject which comprises: a) introducing into cancer cells of the subject the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA and b) administering a chemotherapeutic agent or radiation to the subject.

13. The method of claim 12, wherein the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA is introduced into the cancer cells before the chemotherapeutic agent or radiation is administered to the subject.

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14. The method of claim 12, wherein the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA is introduced into the cancer cells after the chemotherapeutic agent or radiation is administered to the subject.

15. The method of claim 12, wherein the gene product of the early region 4 (E4) open reading frame 6 (ORF-6) of genomic adenoviral DNA is introduced into the cancer cells concurrently with administering the chemotherapeutic agent or radiation to the subject.

Please add new claims 17 and 18.

17. The method of claim 6 wherein said step of introducing is performed by transfection.

18. The method of claim 11 wherein said step of introducing is performed by transfection.

REMARKS

By this amendment, claims 1-5 have been cancelled, claims 6-15 have been amended, and new claims 17 and 18 have been added. The application includes claims 6-18.

Support for the amended claims is found in the specification as follows:

Claim 6, page 8, lines 16-20;

Claim 7, page 8, lines 22-25;

Claim 8, page 8, lines 27-30;

Claim 9, page 8, lines 32-35 and page 9, line1;

Claim 10, page 9, lines 3-8;

Claim 11, page 9, lines 10-14;

Claim 12, page 9, lines 16-21;

Claim 13, page 26, line 34- page 27, lines 1-4;

Claim 14, page 26, lines 6-10; and

Claim 15, page 26, lines 12-16.